

**Case 2934*****Bagrus hoevenii* Bleeker, 1846 (currently *Hemibagrus hoevenii*; Osteichthyes, Siluriformes): proposed designation of a neotype**

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**Abstract.** The purpose of this application is to propose a neotype for *Hemibagrus hoevenii* (Bleeker, 1846), an economically important catfish from Southeast Asia, the name of which had previously been regarded as a junior subjective synonym of *H. nemurus* (Valenciennes in Cuvier & Valenciennes, 1840) but is now regarded as valid. Designation of a neotype will resolve the uncertain identity of *H. hoevenii* and stabilise the taxonomy of the species.

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1. Bagrids of the *Hemibagrus nemurus* (Valenciennes in Cuvier & Valenciennes, 1840, p. 423) species-group are economically important catfish in South and Southeast Asia, and their taxonomy has been particularly confused. There are a large number of nominal species for which types are not always readily available or easy to identify.

2. One of these nominal species is *Bagrus hoevenii* Bleeker, 1846, described (p. 154) from Java on the basis of an unspecified number of specimens of unstated size. Bleeker (1862, p. 56) subsequently noted that he had 10 specimens ranging from 126–290 mm in total length from 10 localities in Java, Sumatra and Borneo. Bleeker (1862, pl. 70) also provided a figure of *B. hoevenii* for the first time, although the provenance of the specimen on which it was based was not stated.

3. *Bagrus hoevenii* Bleeker, 1846 was accepted as a valid species until Weber & de Beaufort (1913, p. 341) synonymised it under *B. nemurus* Valenciennes in Cuvier & Valenciennes, 1840.

4. The problem with Bleeker's type material is well known. Specimens (including syntypes) of what he regarded as one species, even if they were from different localities, were often placed in the same bottle without any data or explanation to their origins. Some of this material is in poor condition. There is also a very good chance that the original type material of *B. hoevenii* is lost. Bleeker (1846) described *B. hoevenii* while stationed in Batavia (now Jakarta) but was shortly afterwards transferred to Samarang. Of this transfer, Bleeker (1878, p. 21) wrote that 'it was out of the question to move my collections to my new station, so I had to leave them behind in Batavia'. Boeseman (1973, p. 59) noted that 'When Bleeker returned from the East Indies [in 1860], he still had in his possession all the original specimens on which he had based the descriptions of his new species, excepting a few that had

already been lost in the East Indies during the period of his banishment from Batavia'.

5. In the Nationaal Natuurhistorisch Museum in Leiden there is a series of Bleeker's specimens (NNM 6684) labelled as *Bagrus hoevenii*. We examined eight specimens (97.5–320 mm standard length; 122–400 mm total length), all without any data. These specimens seem to be two species but their twisted condition, damaged fins and spines as well as their faded coloration make most of them difficult to identify. It is noteworthy that while the smallest of these specimens is in agreement with Bleeker's data in his atlas (126 mm total length), the largest are much larger (400 mm against 290 mm). Moreover, the largest specimen is *H. nemurus*. One of the specimens (210 mm standard length) is almost certainly the one figured natural size by Bleeker (1862, pl. 70) but he did not record if this was one of his original Javanese specimens; it may be one of his Sumatran or Bornean specimens. It is not possible to be completely sure if this specimen is conspecific with our specimens from Peninsular Malaysia and Sumatra as several characteristics are no longer discernible. We have been unable to find recent specimens from Java referable to *B. hoevenii*.

6. Whether any of the NNM specimens are the type(s) of *B. hoevenii* can never be established for certain. This uncertainty, compounded with the poor condition of the specimens and the fact that Bleeker had specimens of *B. hoevenii* from Java, Sumatra and Borneo, makes it very unwise to select a lectotype from this series.

7. Bleeker also distributed some of his specimens to the British (now Natural History) Museum in London, and Günther (1864, p. 81) lists in his catalogue 'one of the typical specimens' of *Bagrus hoevenii*. As the specimen sent to the Natural History Museum was sent after the publication of vol. 2 of Bleeker's atlas (1862), the above discussion applies to this specimen as well, and there is no way of knowing if it is actually a type. The same applies to any of Bleeker's specimens in other museums (his material was auctioned and distributed to other museums after his death).

8. In an ongoing revision of the Sundaic members of the *Hemibagrus nemurus* species-group, we and our colleagues recognise as valid several species which had previously been placed under the synonymy of *H. nemurus* sensu lato. The identity of *B. hoevenii* Bleeker, 1846 now comes into question as an available name for one of the species we recognise. In particular, specimens of a large bagrid with black-edged caudal fin from Peninsular Malaysia, Borneo and Sumatra closely resemble what Bleeker (1862, pl. 70) had illustrated as *B. hoevenii*. *Hemibagrus hoevenii* (in this sense) seems to be widely distributed in Sundaic Southeast Asia and has been confused under *H. nemurus*, a widely fished species. *H. hoevenii* is distinguished from *H. nemurus* mainly in having a black-edged caudal fin with tapering lobes (vs. caudal fin without black edges and fairly rounded lobes). Papers on various aspects of the taxonomy, phylogeny and ecology of the *Hemibagrus nemurus* species-group are now in preparation. It is thus necessary to firmly fix the identity of *Bagrus hoevenii* Bleeker, 1846 to prevent future confusion.

9. Recommendation 75E of the Code says 'Neotypes should be designated to clarify the application of names when their continued existence as nomina dubia threatens the stability of other names; if, despite the existence of a holotype, or a lectotype or syntypes, it is not possible to resolve a complex zoological problem, a zoologist should refer the case to the Commission which may, by the use of the plenary power, set aside the existing type material and designate a neotype'.

10. In view of this and the need to have this name stabilised, we therefore propose that a neotype for *Bagrus hoevenii* Bleeker, 1846 be chosen to replace the series of Bleeker specimens which may or may not include a holotype or syntypes. The proposed neotype is a specimen 116 mm standard length, 170 mm total length, collected from Kampong Bukit Kebong at Muar River, Johor, Peninsular Malaysia by M. Kottelat & K.K.P. Lim on 25 July 1992. It is deposited in the Zoological Reference Collection of the Department of Zoology, National University of Singapore, under the catalogue number ZRC 37472. Although the specimen is not from Java, it conforms to Bleeker's (1862, p. 56, pl. 70) figure and redescrptions, as well as to the specimen in Leiden on which his figure is probably based.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Bagrus hoevenii* Bleeker, 1846 and to designate as the neotype the specimen ZRC 37472 in the Zoological Reference Collection at the Department of Zoology, National University of Singapore described in para. 10 above;
- (2) to place on the Official List of Specific Names in Zoology the name *hoevenii* Bleeker, 1846, as published in the binomen *Bagrus hoevenii* and as defined by the neotype designated in (1) above.

## References

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